# ANALYSIS OF CHANGES TO THE ALTERNATE THRESHOLD PROVISIONS

Presented to: The National Advisory Council for Environmental Policy and Technology, Toxics Data Reporting Committee

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Agency, the Office of Management and Budget, and the

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#### INTRODUCTION

This report has been prepared by staff from the Environmental Protection Agency (EPA), the Office of Management and Budget (OMB), and the Small Business Administration (SBA), to provide background information to the National Advisory Council for Environmental Policy and Technology (NACEPT) Toxics Data Reporting (TDR) committee as it considers ways to reduce burden associated with EPCRA section 313 compliance. This report is in part a response to the commitment made by EPA in the May 1, 1997 Industry Expansion final rule (62 FR 23834) in which it announced that it will "initiate an intensive stakeholder process to comprehensively evaluate the current reporting forms and reporting practices," along with the points raised by the Vice President in his 1997 Earth Day speech announcing the Industry Expansion final rule in which he said "one important aspect [of this action] is the reinventing feature that streamlines the collection of information by the businesses affected by this announcement and protects the environment in new ways, while at the same time reducing the burden of information collection on businesses." Many of the options provided in this report were suggested by commenters during the public comment period provided in conjunction with OMB review of the Alternate Threshold Certification Statement (Form A) under the Paperwork Reduction Act (PRA).

The objectives of this report are to present to the TDR committee some of the suggested changes to the alternate threshold provisions and to characterize the potential impact each may have on the information made available under the TRI program and on the cost of compliance. The options presented in this document are not necessarily endorsed or recommended by the agencies involved in its preparation. Furthermore, the TDR committee is not limited to considering only the options presented in this report. The purpose of this document is simply to facilitate the TDR committee's review of options potentially available for reducing the burden of compliance with the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) section 313 program. Any changes to the program ultimately must be proposed and adopted by EPA, which retains the authority and responsibility to ensure that they are appropriate and consistent with applicable legal requirements.

#### I. BACKGROUND

EPCRA section 313 requires that covered facilities complete a toxic chemical release form containing at a minimum the elements specified at section 313(g). Facilities are covered if they manufacture or process more than 25,000 pounds, or otherwise use more than 10,000 pounds, of a listed toxic chemical, and operate within certain Standard Industrial Classification (SIC) codes, and have ten or more employees or the equivalent. Section 313(g) requires covered facilities to submit a report (Form R) which generally contains 1) facility identification and classification information; 2) completed certification statement; 3) chemical use information; 4) estimates of maximum amounts at the facility; 5) for each waste stream, identification of treatment activities

and their efficiencies, and 6) annual quantities of the toxic chemical entering each environmental medium, which includes at a minimum releases. Additionally, facilities that are covered under EPCRA section 313 are also subject to requirements under the Pollution Prevention Act (PPA) 42 USC § 6607, which requires covered facilities to also report chemical specific source reduction, recycling, and other related information.

On November 30, 1994, EPA promulgated an alternate TRI reporting threshold, for facilities which do not generate in excess of 500 pounds of "total production-related waste" (annual reportable amount) of a listed toxic chemical, at one million pounds of amounts manufactured, processed, or otherwise used for that toxic chemical. Facilities meeting these conditions may choose to submit a certification statement (Form A) supporting their determination, and in so doing are not required to submit the detailed information required on Form R. Form A contains facility identification information, and a certification that the facility had from 0 to 500 pounds of "total production-related waste" for a listed toxic chemical. At the time of promulgation, EPA estimated that approximately 20,100 chemical reports or approximately 25 percent of total forms submitted would be eligible to take advantage of the alternate threshold. This original estimate represented a potential annual burden reduction of approximately 351,750 hours for the TRI program.

EPA developed the alternate threshold in response to concerns raised by SBA, relief requested by the American Feed Industry Association (AFIA), and comments submitted by the public in response to the AFIA and SBA petitions. In order to respond to these requests for burden reduction, EPA relied on EPCRA section 313(f)(2) which provides EPA with the authority to modify reporting thresholds. In exercising this authority however, EPA must maintain "reporting on a substantial majority of total releases of the chemical at all facilities subject to the [EPCRA section 313 reporting] requirements."

The current OMB approval for use of Form A was recently extended from May 31, 1998 to August 31, 1998 in order to provide qualifying facilities with continued use of the alternate threshold option for submissions due by July 1, 1998, while EPA considers ways of further streamlining the TRI requirements for future years. Consideration of TRI burden reduction measures by the NACEPT TDR committee and any resulting recommendations are an important part of that process. As part of the renewal process for PRA approval, EPA submitted an Information Collection Request (ICR) to OMB and published a notice in the Federal Register on December 24, 1997, in response to which it received a number of comments. EPA also prepared an Interim Report on the TRI Form A (which was previously submitted to the TDR committee) to consider its efficacy in reducing reporting burden for the 1995 reporting year--the first year that Form A was available. OMB had previously asked that EPA evaluate the potential effect of modifying the current eligibility requirements for use of Form A on both the number of users of Form A and the amount of data which is currently collected that might be lost. More recently, OMB and SBA requested that EPA also analyze the effects of raising the "total productionrelated waste" eligibility threshold from 500 pounds to either 2,000 or 5,000 pounds, in addition to the 1,000 pound option analyzed in the *Interim Report*, and of basing the eligibility threshold

calculation on a reduced number of waste streams other than those presented in EPA's report, in order to reduce the number of waste streams that facilities would have to track to determine their eligibility for use of Form A.

The remainder of this report is organized as follows. Section II provides data on use of Form A for reporting year 1996, and thus updates the 1995 data on Form A usage provided in the *Interim Report*. Sections III and IV present information on two broad categories of potential changes to the current Form A provisions. Section III discusses options designed to streamline current submission requirements, without changing the eligibility requirements, for use of the Form A option. The impacts of these options are discussed qualitatively. Section IV discusses various options that would change the eligibility for use of Form A and provides data on information loss and cost savings associated with some of these options.

#### II. RESULTS FROM 1996 REPORTING

Before discussing changes to Form A provisions, it is important to consider the statistics for Form A usage as it currently exists. Based on results of the 1996 reporting year, the following numbers illustrate how frequently Form A was actually used and how frequently facilities met the eligibility requirement for amounts of the listed toxic chemical in waste, but did not submit a Form A.

The following table provides data on actual and potential use of Form A for 1996--the second year for which this option was available. Some portion of the Form Rs that reported less than 500 pounds of total production related waste may not have been eligible for use of the Form A because they exceeded the 1 million pound manufacture, process or otherwise use (MPU) threshold. Since facilities filing Form R are not required to specify how much of a listed toxic chemical they manufacture, process, or otherwise use, the percent of those chemical submissions that may have been ineligible to take advantage of the Form A because they exceeded the alternate MPU threshold of 1 million pounds is not known. However, based on an informal survey of nine such facilities that was discussed in the *Interim Report*, as well as data from one state (MA) which has enhanced TRI reporting requirements, EPA does not believe that a significant portion of facilities were excluded from Form A eligibility for this reason. The *Interim Report* lists several possible reasons that apparently eligible facilities gave for not using the Form A, including lack of awareness of the form, a belief that it did not represent substantial burden reduction over use of the Form R, and a preference for providing the full information included in the Form R.

## Table 1: Reporting Year 1996 Use and Potential Use of Form A

Form A's submitted:	7,234
Form R's meeting Form A waste criteria (<500 lbs):	11,441
Total number of Form R's and Form A's submitted:	71,381

## Table 1(con't): Reporting Year 1996 Use and Potential Use of Form A

Form A's as a percent of total forms:	10.1%
Form R's meeting Form A waste criteria as a percent of total forms:	15.4%
Form A's + Form R's meeting Form A waste criteria as percent of total forms:	26.2%
Facilities using Form A:	3,349
Potentially eligible facilities that did not use Form A:	5,612
Total facilities reporting:	21,626
Percent of total facilities using Form A:	15.5%
Percent of total facilities that were potentially eligible but did not use Form A:	26.0%
Percent of total facilities using Form A or potentially eligible to use Form A:	41.5%
Estimated Average time saved using Form A (per form)	17.5 hrs
Estimated burden reduction realized from use of Form A for Reporting Year 1996:	126,600 hrs
Estimated potential* burden reduction for Reporting Year 1996:	326,812 hrs

<sup>\*</sup>Potential = Estimated time saved from Form A's submitted plus incremental increase in savings if Form R's meeting the waste criterion were substituted with Form A's.

Based on results presented in Table 1, it appears that potential eligibility for use of the current alternate threshold is significantly greater than its actual usage. Similar results were observed for the previous year's reporting.

#### III. OPTIONS THAT WOULD NOT CHANGE FORM A ELIGIBILITY

The following changes have been suggested to reduce the burden associated with using the current Form A option. They would not change the eligibility requirements for use of this reporting option, but might increase the number of eligible facilities who choose to use it.

Some of the options presented in this section might reduce burden without any loss of information. These options are designed to make the use of the current Form A more attractive to currently eligible facilities. Other options would eliminate some or all of the information that facilities are currently required to submit in order to qualify for the alternate threshold.

## a) Allow multiple chemicals per certification

Eligible facilities would report their facility-specific identification information once, and then simply enter the names and Chemical Abstract Service (CAS) numbers for each listed toxic chemicals that met the alternate threshold eligibility requirements. This would reduce paperwork burden for eligible facilities with more than one qualifying chemical. While this would require a redesign of Form A and some data entry procedures, it would not reduce the amount of information available to the public.

#### b) Combined Reporting Forms

The Form A and Form R could be combined into one package. The combined reporting package would include a cover sheet containing facility identifying information, which would be preprinted by EPA in subsequent years as is currently done for the Form R, followed by a question regarding eligibility for the alternate threshold. Eligible facilities would be informed on the form that they need only sign the certification statement, while all others would be directed to complete the full Form R. This option would ensure that all submitters were aware of the alternate threshold option and their potential eligibility to use it. The form could be structured so that each facility would enter its identification information only once. While this option may ensure that each submitter is aware that Form A is an option, it may create confusion over which form to use and how the data are managed, especially for facilities that report on multiple chemicals including both Form Rs and Form As.

## c) Eliminate some facility-level information from Form A

The current Form A includes a number of facility-level information elements including facility name, address, longitude, latitude, county where located, SIC code, TRI identification number, Dun & Bradstreet number, various other EPA identification numbers (RCRA, NPDES, UIC), parent company name, and parent company Dun & Bradstreet number. This option would reduce the number of facility identification data elements on the form which would also reduce the length of the form; some commenters have suggested a "post card" format. This would reduce reporting burden for eligible facilities but would require users of the data to access other data sources if they needed this information. A variation on this option would require that the current Form A facility information be submitted one time, with a shortened "post card" certification allowed in subsequent years. For this variation, EPA could carryover facility-level information each applicable year resulting in little or no loss of information to the TRI database.

#### d) Do not require a certification statement (i.e., Form A) to be submitted.

Facilities meeting the alternate threshold would not be required to submit anything for the chemicals for which they are eligible, nor would they be explicitly required to maintain records documenting their eligibility determination. This would reduce reporting and recordkeeping burden and treat facilities eligible for the alternate threshold the same as those not required to report based on statutory criteria (i.e, less than 10 employees or less than 25,000 pounds manufactured and processed and less than 10,000 pounds otherwise used). It would also cause the TRI database to lose the information that a facility had from 0 to 500 pounds of "total production-related waste" for a listed toxic chemical, and would make it more difficult to identify, and if necessary, conduct enforcement actions against facilities that inappropriately claimed eligibility for the alternate threshold. Additionally, the information contained on the current Form A would no longer be available to meet the "substantial majority" requirement of section 313(f)(2). However, based on current information, it may not be necessary to have this information in order to meet this requirement. [Table 2 (in the next section) provides data on the loss of information under various eligibility requirements.]

## e) One time certification

Facilities eligible for the alternate threshold would be required to submit Form A only once for any eligible listed toxic chemical, with no additional reporting required by the facility in subsequent years unless the facility's eligibility status for the listed toxic chemical changed. This option would reduce reporting and recordkeeping burden in subsequent years. EPA would maintain the information from the one-time certification in the TRI database, along with the year of certification. However, users of the database would be less sure of the current status of a facility than under the current annual certification requirement, because of the possibility that a facility might neglect to report changes in eligibility status or is no longer in operation. This option could raise similar concerns as those discussed under option (d) regarding meeting the "substantial majority" test.

#### IV. OPTIONS FOR INCREASING ELIGIBILITY FOR FORM A

The following options would change the eligibility requirements for use of Form A. Eligibility for use of Form A is based on two criteria--the "total production-related waste" threshold of 500 pounds, and an activity threshold or "alternate threshold" of one million pounds. If either is raised, some number of facilities may become newly eligible to use Form A. Three types of changes to the eligibility requirements for Form A have been suggested: 1) increase the level of the waste threshold; 2) change the categories of waste included in its calculation; and 3) increase the level of the activity threshold. The following section describes various options within these categories and analyzes their potential impact in terms of data loss and cost savings.

a) Increase the level of the waste threshold

The current level is set at 500 pounds. EPA has analyzed the effects of using three alternate levels: 1,000 pounds, 2,000 pounds, and 5,000 pounds. The results of this analysis are presented in Table 2.

b) Change the categories of waste included in the waste threshold calculation

The current requirements are based on the calculation of "total production-related waste," which is the sum of data elements 8.1 ("quantity released"), 8.2 ("quantity used for energy recovery onsite"), 8.3 ("quantity used for energy recovery off-site"), 8.4 ("quantity recycled on-site"), 8.5 ("quantity recycled off-site"), 8.6 ("quantity treated on-site"), and 8.7 ("quantity treated off-site) on the Form R. The current option in Table 2 would leave the definition of reportable amount used in the waste threshold calculation unchanged. Three additional options have also been analyzed. They are:

- Total Production Related Waste Except Quantities Recycled (sum of data elements: 8.1 + 8.2 + 8.3 + 8.6 + 8.7)
- 2) Quantities Released\* + Amounts Treated (which would exclude quantities recycled and used for energy recovery from the "total production-related waste" amount) (sum of data

elements: 8.1 + 8.6 + 8.7)

3) Quantity Released\* (which includes quantity released on- and off-site and off-site transfers for disposal (data element 8.1 only)

(\*= releases as defined at EPCRA section 329(8) excluding catastrophic and other accidental releases not associated with production processes.)

Note that an additional data element, 8.8 ("quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes") is not included in the waste threshold calculation under either the current requirements or any of the alternate options analyzed. (However, an estimate of the amount of information associated with data element 8.1 plus 8.8 that would be lost under the various options is included in Table 2.)

Table 2 shows, for each threshold level and waste threshold option, the quantity of "total production-related waste" that would no longer be reported on Form R, the quantity of releases only that would no longer be reported on Form R, the number of Form R's that would be replaced by Form As, the number of chemicals for which current reporting indicates that all Form Rs would no longer be reported, number of Forms Rs associated with those chemicals, the total production-related waste for those chemicals, and the estimated dollar cost savings, if the option were adopted and all eligible Form A's were filed, based on 1996 reporting year data. Lost information about releases to the environment on- and off-site is broken out separately in the table because some stakeholders believe that this information is especially important.

Note that all effects are calculated against a baseline in which all reports are filed using Form R, in order to show the effects (e.g., cost savings) of the Form A option currently in place. Also note that for current Form A submissions, the amounts of waste are not known, other than that their total is between 0 and 500 pounds. Therefore, for the 7,234 Form As filed in 1996, Table 2 conservatively assumes that each Form A represents 500 pounds of releases reportable in data element 8.1. The estimates of waste information lost thus represent upper bounds for these Form A's. Note also that data item 8.8 (catastrophic and one-time releases not associated with production) is not part of the definition of production- related waste, and thus not part of the current Form A threshold eligibility calculation. As a result, amounts associated with these activities are not included in the calculation for current Form A submissions.

**Table 2: Estimated Impacts of Various Options (based on 1996 data)** 

Option		Production-Related \((8.1 thru 8.7)	Releases <sup>2</sup> Reduction in Form Rs <sup>3</sup>		Chemicals on Form A only <sup>4</sup>			Cost Savings <sup>5</sup>				
		Pounds not reported on Form R	Total	Pounds not reported on Form R		Number of Form Rs		No. of Chemicals	No. of Form Rs	Quantity (8.1-8.7)	\$Annual Savings (million)	% of Total
Current	500	4,849,080	0.02	5,647,087*	0.3	18,675	26.2	70	127	27,231	\$20	4.9
Basis	1,000	6,975,607	0.03	8,091,658	0.4	21,560	30.2	84	156	38,397	\$23	5.7
(8.1 thru 8.7)	2,000	11,519,380	0.05	10,703,611	0.6	24,677	34.6	100	225	73,003	\$26	6.4
0.7)	5,000	27,726,094	0.12	18,828,514	1	29,538	41.4	123	347	190,764	\$31	7.6
Option 1 (8.1 + 8.2 + 8.3 + 8.6 + 8.7)	500	994,247,862	4.2	6,951,867	0.4	25,362	35.5	N/A@	N/A	N/A	\$31	7.6
	1,000	1,303,950,769	5.6	9,225,845	0.5	28,802	40.3	N/A	N/A	N/A	\$35	8.6
	2,000	1,608,873,488	6.9	12,846,355	0.7	32,305	45.2	N/A	N/A	N/A	\$39	9.6
1 0.7)	5,000	2,007,777,549	8.6	23,670,847	1.3	37,264	52.2	N/A	N/A	N/A	\$46	11.4
Option 2	500	1,282,386,962	5.5	7,187,987	0.4	27,002	37.8	N/A	N/A	N/A	\$37	9.1
(8.1 + 8.6)	1,000	1,689,895,007	7.2	9,789,815	0.5	30,762	43.1	N/A	N/A	N/A	\$43	10.6
+ 8.7)	2,000	2,148,843,476	9.2	14,092,920	0.8	34,590	48.4	N/A	N/A	N/A	\$48	11.8
	5,000	2,903,946,765	12.4	26,799,139	1.4	39,811	55.8	N/A	N/A	N/A	\$55	13.6
Option 3 (8.1 only)	500	2,984,182,817	12.7	8,434,218	0.4	35,741	50	133	343	3,327,666	\$52	12.8
	1,000	3,697,984,209	15.8	12,037,741	0.6	39,857	55.8	154	418	18,535,324	\$58	14.3
	2,000	4,679,015,290	20	18,280,033	1	43,863	61.4	185	727	44,754,820	\$64	15.8
	5,000	6,383,626,276				49,229	69			104,369,953	\$72	17.8

<sup>&</sup>lt;sup>1</sup> "Total Production-Related Waste" (sum 8.1 through 8.7) for reporting year 1996 is 19,008,796,205 pounds.

Each of these options represents a trade-off between waste management information not reported to the public and cost savings to the

<sup>&</sup>lt;sup>2</sup> Total "Releases" including releases from non-production related activities (sum 8.1 plus 8.8) for reporting year 1996 is 1,853,728,875 pounds.

<sup>&</sup>lt;sup>3</sup> Total Forms received for reporting year 1996 is 71,381 (includes Form Rs and Form As).

<sup>&</sup>lt;sup>4</sup> Chemicals for which all submissions may be limited to Form As (total listed toxic chemicals is approximately 650, total chemicals reported in 1996 is 489).

<sup>&</sup>lt;sup>5</sup> Estimated total cost of reporting is \$405 million.

<sup>\*</sup> Does not include amounts released due to remedial actions or catastrophic events reported in 8.8 for the certifications statements (Form A's) submitted.

<sup>&</sup>lt;sup>®</sup> These numbers were not yet available, but will be provided in a follow-up hand-out for the May meeting.

reporting facilities. Note that several commenters indicated that a significant share of the cost involved in TRI compliance stems from the need to track chemicals, whether they are ultimately reported on Form R or not. This may be one reason why so many apparently eligible facilities do not use Form A; once they have tracked the required information for a listed chemical over the course of a year, they may see little savings from using Form A rather than Form R. For such facilities, options 1 through 3 on Table 2 may potentially reduce a greater amount of burden by reducing the number of waste streams a facility is required to track in order to determine Form A eligibility for a particular chemical. At the same time, these options would also allow unlimited quantities of waste in the categories not tracked to go unreported to the public, which could represent a significant loss of information. Several commenters have also argued that excluding certain beneficial uses, such as recycling and energy recovery, from the threshold calculation would encourage these practices, thus providing potential environmental benefits in addition to burden reduction. It has been suggested that these activities pose less risks to the community and therefore loss of such information may be less of a concern. On the other hand, members of the public who use TRI information to identify opportunities for increasing such beneficial uses, as well as initiatives that support reduction measures, could lose valuable information about what facilities are doing in these areas, and how much material is still being managed as a waste.

# c). Expand Form A and add range information.

One suggestion which has been made to partially offset the loss of information that would result from an expansion of eligibility requirements is to include some additional information on quantities of waste in different management categories on the Form A. As a result, rather than lose all of the information from those Form Rs that were no longer submitted, some amount of information, although substantially less than that collected on Form Rs, would be required. Qualifying facilities would complete the facility identification information, and then submit range estimates on some of the elements currently contained on Form R. This option is intended to provide burden reduction for facilities who do not now qualify for use of the Form A, while at the same time providing the public with some Right-to-Know information. SBA has suggested a possible format for such an "enhanced Form A" (see attachment 1.)

Range information generally would provide some level of quantitative information about the waste management practices involved with a particular chemical, whereas the current Form A provides no information about the various waste management activities. Range information for energy recovery and recycling could identify opportunities for increasing such beneficial uses and for source reduction (see above).

There are potentially difficult data management and enforcement issues under this option. For example, it is not clear how the range reporting information would be provided to EPA and subsequently made available to the public, or what level of enforcement would be used to ensure that facilities are applying a reasonable degree of accuracy when submitting range information.

## d). Increase the level of the current activity threshold.

The current "alternate threshold" is set at 1 million pounds. Facilities that do not exceed 500 pounds of "total production-related waste" for a given listed toxic chemical may apply the alternate threshold of 1 million pounds to that listed toxic chemical. The alternate threshold level could be raised to 2 million, 5 million, 10 million pounds or any other amount that is determined to be appropriate. At the time of the alternate threshold final rule, EPA selected the 1 million pound threshold based on its determination that it would exclude few facilities that met the "total production-related waste" criterion of 500 pounds.

Some commenters have suggested that there may be very efficient facilities that manufacture, process or otherwise use large quantities of listed toxic chemicals while still generating less than 500 pounds of "total production related waste." This may explain why some of the 11,500 Form R chemical reports that were apparently eligible to use the Form A in 1996 did not--they may in fact not have been eligible because they did not meet the alternate threshold. Increasing the number of facilities that use Form A by raising the alternate threshold would reduce recordkeeping and reporting requirements for such facilities, though EPA believes it unlikely that a significant proportion of facilities are currently prevented from using the Form A for this reason. At the same time, it might be more important for the public to know detailed information about even small waste quantities from such high volume facilities for several reasons--one being that they could provide an example to other facilities of efficient toxic chemical management practices. Continuing to require Form R reporting from such facilities would also reduce the chances that a facility managing large volumes of listed toxic chemicals would inappropriately use the Form A and in so doing potentially allow a significant risk to the community to go unreported.

## (ATTACHMENT 1)

(Example of enhanced Form A)

## RELEASE AND TRANSFER INFORMATION

## **Annual Amount Releases, Transfers**

	<u>o</u>	1-5,000 Pounds
1. Air Emissions	0	0
2. Water Release	0	0
3. Underground Injection	0	0
4. Releases to Land On-site	0	0
5. Onsite Treatment	0	0
6. Off-site Transfers to POTW	0	0
7. Off-site Transfers Other than POTW/Recycling /Energy Recovery	0	0

### Annual Amount Recycled or Energy Recovered

	<u>0-999</u>	<u>1,000- 99,999</u>	100,000+ Pounds
1. Offsite Recycling	0	0	0
2. Onsite Recycling	0	0	0
3. Offsite Energy Recovery	0	0	0
4. Onsite Energy Recovery	0	0	0